Abstract of the Disclosure

Provided are an apparatus and method for cryptographing and/or deciphering an image. The apparatus includes an image segmenting unit, a random image generating unit, a cryptographing unit, and a phase card generating unit. The image segmenting unit segments an input binary image into images. The random image generating unit generates as many random images as the segmented images. The cryptographing unit performs XOR operations on the segmented images and the random images on a one-to-one basis to produce as many cryptographed images as the segmented images. The phase card generating unit assigns phase values of π and 0 to black and white pixels of the cryptographed images to generate phase cards corresponding to the cryptographed images.